

PAT-NO: JP406185356A
DOCUMENT-IDENTIFIER: JP 06185356 A
TITLE: EXHAUST SILENCING DEVICE OF MOTORCYCLE

PUBN-DATE: July 5, 1994

INVENTOR-INFORMATION:

NAME **COUNTRY**
NISHIMOTO, YUJI

ASSIGNEE-INFORMATION:

NAME **COUNTRY**
SUZUKI MOTOR CORP N/A

APPL-NO: JP04334622

APPL-DATE: December 15, 1992

INT-CL (IPC): F01N007/18 , F01N001/24 , F01N007/08

US-CL-CURRENT: 181/264

ABSTRACT:

PURPOSE: To provide a structure of an exhaust pipe for a motorcycle in which a silencer can be removed from a muffler body at the time of disassembling, and also the appearance can be improved.

CONSTITUTION: In an exhaust system of a motorcycle having a muffler with a silencer attached to an inner periphery of a muffler body 6, plural silencer fixing brackets 14, 14... are arranged in the axial direction with an equal interval on the outer periphery of a silencer holding cylinder 13 which is integrated with a baffle pipe 5, and silencers 12, 12... split in the axial direction with the width corresponding to this interval are held among the brackets 14, 14.... This device is constructed so that a flange 16, which is fixed to the outer periphery of the baffle pipe 5, is fixed to baffle pipe fixing brackets 17, 17..., which are provided on the inner periphery of the portion corresponding to the slits of the silencers 12, 12... of the muffler body 6, by using screws 11.

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接等により固着されている。そして前記フランジ部材16の取付穴18、18…に挿入するスクリュ11を前記バッフルパイプ取付用ブラケット17のねじ穴19にねじ込むことにより両者を締着できるようになっている。

【0016】次に作用を説明する。

【0017】バッフルパイプ5とマフラボディ6との組付時には、サイレンサ保持筒13の外周のサイレンサ取付用ブラケット14、14、14の隣位のものの押え部15、15間にサイレンサ12、12、12を嵌め込んだ上、これをマフラボディ6内に挿入する。

【0018】バッフルパイプ5のフランジ部材16をマフラボディ6内に嵌入し、その取付穴16、16…とマフラボディ6側のバッフルパイプ取付用ブラケット17、17…のねじ穴19、19…とを位置合せしてスクリュ11を挿入し、締着する。これによりバッフルパイプ5とマフラボディ6とが一体化され、スクリュ11の頭部はマフラボディ6内に隠れて外からは見えない。

【0019】分解時にはスクリュ11を緩めて取り、次いでバッフルパイプ5を引き抜けばサイレンサ保持筒13と一緒に引き出されてサイレンサ12が露出し、サイレンサ取付用ブラケット14、14間から容易にサイレンサ12を個々に取り外すことができ、清掃や交換ができる。

【0020】

【発明の効果】以上のようにこの発明によれば、サイレンサの交換や清掃時にスクリュの回転操作のみによって簡単に分解してサイレンサを取り出すことができるので、分解作業が容易にでき、またバッフルパイプ取付用

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のスクリュがマフラの周面には表われないので外観を良くすることができる。

【図面の簡単な説明】

【図1】この発明による排気消音装置の一実施例を示す分解斜視図。

【図2】この発明による排気消音装置の一実施例を示す断面図。

【図3】図2のA-A視説明図。

【図4】この発明の適用対象である自動2輪車を示す略示側面図。

【図5】従来の技術を示す断面図。

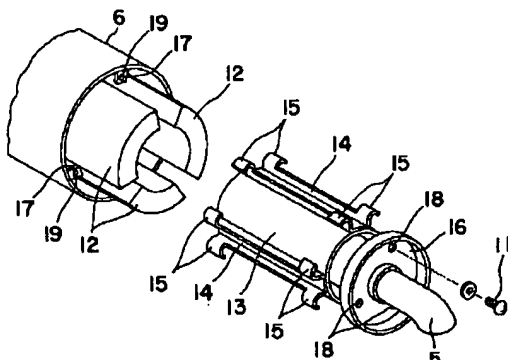
【図6】従来の他の技術を示す断面図。

【図7】従来のさらに他の技術を示す断面図。

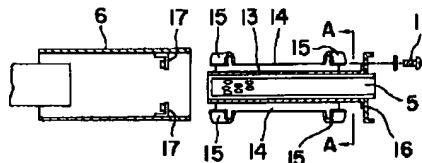
【符号の説明】

- 1 車体フレーム
- 2 エンジン
- 3 エキゾーストパイプ
- 4 マフラ
- 5 バッフルパイプ
- 6 マフラボディ
- 11 スクリュ
- 12 サイレンサ
- 13 サイレンサ保持筒
- 14 サイレンサ取付用ブラケット
- 15 押え部
- 16 フランジ部材
- 17 バッフルパイプ取付用ブラケット

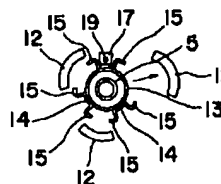
【図1】



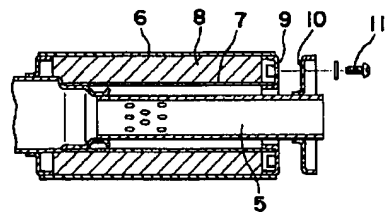
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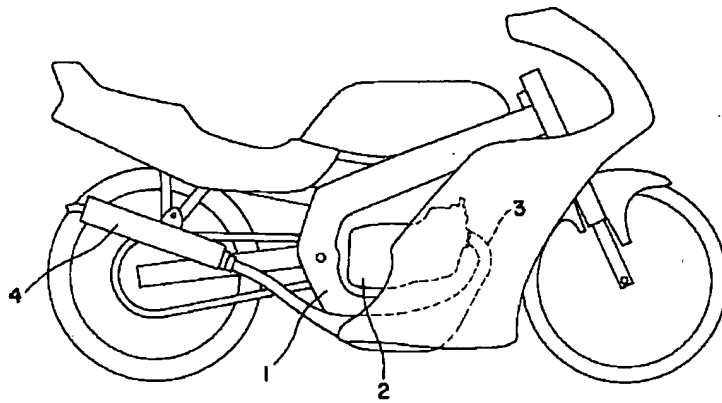
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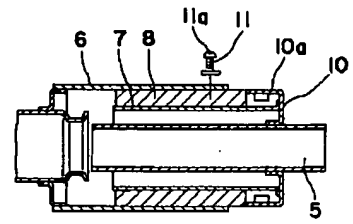
【図5】



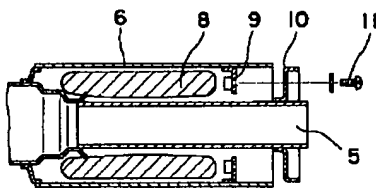
【図4】



【図6】



【図7】



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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the exhaust air silencer of a two automatic vehicle.

[0002]

[Description of the Prior Art] An engine 2 is put on the car-body frame 1 so that the two automatic vehicle carrying 2 stroke engine may be sketched in drawing 4 , and the exhaust pipe 3 of this engine 2 is arranged via a lower part from a before [the car-body frame 1] side, and is connected to the muffler 4 (second muffler) attached in the back flank of the car-body frame 1. Since this muffler 4 removes the carbon with which the interior is covered, it may be made into the structure which can be decomposed.

[0003] As the structure which enables decomposition of the above-mentioned muffler 4 shows a cross section conventionally to drawing 5 and drawing 7 , the baffle pipe 5 is inserted into muffler HODI 6. It is loaded with the silencer 8 which consists of acoustic material, such as a glass fiber, between the inner circumference of this muffler body 6, and a container liner 7. What was made as [close / it / immobilization / with a screw 11 / immobilization with this baffle pipe 5 and the muffler body 6 compares the flange 9 welded to the inner skin of the muffler body 6, and the flange 10 welded to the peripheral face of the baffle pipe 5, and], Or there are some which were made as [close / with a screw 11 / body 10a of the periphery of a flange 10 and the peripheral face of the muffler body 6 which were welded to the peripheral face of the baffle pipe 5 as shown in drawing 6].

[0004]

[Problem(s) to be Solved by the Invention] However, with the structure by drawing 5 and drawing 7 , even if it removes a screw 11 and extracts the baffle pipe 5 from the muffler body 6, since the silencer 8 is pressed down by the flange 9, it cannot extract a silencer 8. moreover -- since head 11a of a screw 11 appears in the peripheral face of the muffler body 6 with the structure by drawing 6 -- an exterior -- it becomes unsightly.

[0005] This invention was made in view of the above-mentioned situation, and it aims at offering the exhaust air silencer of the two automatic vehicle which can raise appearance nature while it can pick out a silencer from the muffler body at the time of decomposition.

[0006]

[Means for Solving the Problem] In the exhaust air system of a two automatic vehicle which has the muffler by which this invention loaded the inner circumference of the muffler body with the silencer in order to attain the above-mentioned purpose Set two or more brackets for silencer attachment to the periphery section shaft orientations of a baffle pipe and the silencer maintenance cylinder of one, and regular intervals are prepared in them. The silencer divided into shaft orientations with the width of face corresponding to this spacing is made to hold between said brackets. The flange which fixed on the periphery of a baffle pipe, and the bracket for baffle pipe attachment prepared in the inner circumference of the location corresponding to the break of said silencer of said muffler body are closed securely with a screw.

[0007]

[Function] At the time of with [of a baffle pipe and the muffler body] a group, after making a silencer hold between the brackets for silencer attachment of the periphery of a silencer maintenance cylinder, it can insert into the muffler body and can attach by putting firmly the bracket for baffle pipe attachment of the flange of a baffle pipe, and the muffler body on by the screw.

[0008] A silencer can be removed, if a baffle pipe can be sampled from the muffler body and it removes one silencer at a time from between the brackets of the periphery of the baffle pipe by performing actuation contrary to the above at the time of decomposition.

[0009]

[Example] Hereafter, the example of this invention is explained about a drawing.

[0010] Drawing 1 shows a decomposition perspective view, drawing 2 shows this sectional view, and drawing 3 shows drawing seen from [of drawing 2] the A-A line.

[0011] A silencer 12 has the shape of a sector divided into shaft orientations, and let the external surface be the circular face stuck to the inner skin of the muffler body 6. [two or more (an example is three pieces)]

[0012] To the peripheral face shaft orientations of the silencer maintenance cylinder 13 holding this silencer 12, 1 of said silencer 12 and corresponding spacing were set, and the brackets [two or more (an example three pieces)] 14, 14, and 14 for silencer attachment have fixed them to them.

[0013] The cross section was formed in about U typefaces, the presser-foot sections 15 and 15 which bend to the method of outside were formed in that upper limit order section, between the presser-foot section 15 of the brackets 14 and 14 of an adjacent position, and 15, said silencer 12 order section both sides fit in, and this bracket 14 is pressed down.

[0014] To the baffle pipe 5, the flange material 16 which has the outer diameter which fits in that there is no clearance in the inner circumference of the muffler body 6 has fixed by welding etc., and the edge of said silencer maintenance cylinder 13 has fixed by welding etc. to this flange material 16.

[0015] The bracket 17 for baffle pipe attachment and 17 -- have fixed by welding etc. by the inner circumference of the muffler body 6 in the location corresponding to between the presser-foot section 15 of said bracket 14 for silencer attachment, and 15. And both can be put firmly now on by thrusting the attaching hole 18 of said flange material 16, and the screw 11 inserted in 18 -- into the tapped hole 19 of said bracket 17 for baffle pipe attachment.

[0016] Next, an operation is explained.

[0017] After inserting in silencers 12, 12, and 12 between the presser-foot section 15 of the thing of the adjacent position of the brackets 14, 14, and 14 for silencer attachment of the periphery of the silencer maintenance cylinder 13, and 15 at the time of with [of the baffle pipe 5 and the muffler body 6] a group, this is inserted into the muffler body 6.

[0018] The flange material 16 of the baffle pipe 5 is inserted in the muffler body 6, and they are the attaching holes 16 and 16. -- Brackets 17 and 17 for baffle pipe attachment by the side of the muffler body 6 -- A tapped hole 19 and 19 -- are aligned, and a screw 11 is inserted and put firmly on. The baffle pipe 5 and the muffler body 6 are unified by this, and the head of a screw 11 hides in the muffler body 6, and is not visible from outside.

[0019] A screw 11 is loosened and taken at the time of decomposition, if the baffle pipe 5 is subsequently drawn out, the silencer maintenance cylinder 13 can be pulled out together, a silencer 12 can be exposed, a silencer 12 can be easily removed separately from between the bracket 14 for silencer attachment, and 14, and cleaning and exchange can be performed.

[0020]

[Effect of the Invention] Since decomposition can be easily done since only rotation actuation of a screw can decompose easily at the time of exchange of a silencer or cleaning and a silencer can be taken out according to this invention as mentioned above, and the screw for baffle pipe attachment does not appear in the peripheral surface of a muffler, an appearance can be improved.

[Translation done.]